

Task History

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Detailed display from Answer set 7 of Highly Potent, Orally Available Anti-inflammatory Broad-Spectrum Chemokine Inhibitors

Highly Potent, Orally Available Anti-inflammatory Broad-Spectrum Chemokine Inhibitors

By: Fox, David J.; Reckless, Jill; Lingard, Hannah; Warren, Stuart; Grainger, David J.

A series of 3-acylamino-caprolactams are inhibitors of chemokine-induced chemotaxis. Branching of the side chain α -carbon provides highly potent inhibitors of a range of CC and CXC chemokines. The most potent compd. has an ED50 of 40 pM. Selected compds. were tested in an in vivo inflammatory assay, and the best compd. reduces TNF- α levels with an ED50 of 0.1 μ g/kg when administered by either s.c. injection or oral delivery.

Indexing

Pharmacology (Section 1-3)

Concepts

Anti-inflammatory agents

Cell migration

Chemotaxis

Human

Inflammation

Neutrophil

Structure-activity relationship

oral antiinflammatory broad-spectrum chemokine inhibitors

CC chemokines

CXC chemokines

Chemokines

Interleukin 8

Macrophage inflammatory protein 1 α

Monocyte chemoattractant protein-1

RANTES(chemokine)

Tumor necrosis factors

oral antiinflammatory broad-spectrum chemokine inhibitors

Biological study, unclassified; Biological study

Substances

853905-44-9P

oral antiinflammatory broad-spectrum chemokine inhibitors

Drug mechanism of action; Pharmacological activity; Reactant; Synthetic preparation; Therapeutic use;

Biological study; Preparation; Uses; Reactant or reagent

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853905-59-6P
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876063-97-7P
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876063-99-9P
876064-01-6P
876064-02-7P
876064-03-8P
1160115-32-1P
1160115-34-3P

oral antiinflammatory broad-spectrum chemokine inhibitors

Drug mechanism of action; Pharmacological activity; Synthetic preparation; Therapeutic use; Biological study; Preparation; Uses

108-18-9 Diisopropylamine
112-31-2 Decanal
547-63-7 Methyl isobutyrate
671-42-1
870-63-3
924-50-5 Methyl 3,3-dimethylacrylate
2094-72-6 1-Adamantanecarbonyl chloride
2719-27-9 Cyclohexanecarbonyl chloride
2890-61-1 1-Methylcyclohexanecarbonyl chloride
3282-30-2 2,2-Dimethylpropionyl chloride
4301-04-6
5856-77-9 2,2-Dimethylbutyryl chloride
15721-22-9 2,2-Dimethylpentanoyl chloride
19835-38-2
21568-87-6
26081-07-2
28957-33-7
36278-22-5 1-Cyclohexenecarbonyl chloride
39482-46-7 2,2-Dimethyl-4-pentenoyl chloride
39691-62-8 Nonylmagnesium bromide
50321-59-0
60631-34-7 2,2-Dimethyldodecanoyl chloride
67589-90-6
73152-73-5

oral antiinflammatory broad-spectrum chemokine inhibitors

Reactant; Reactant or reagent

2198-82-5P 2,2,5-Trimethyl-4-hexenoic acid
 53663-29-9P (E)-2-Methyldodec-2-enoic acid
 66478-19-1P
 102944-03-6P 3,3-Dimethyldodecanoic acid
 476690-74-3P (E)-Ethyl 2-methyldodec-2-enoate
 853905-71-2P
 1017249-22-7P
 1017249-74-9P

oral antiinflammatory broad-spectrum chemokine inhibitors

Reactant; Synthetic preparation; Preparation; Reactant or reagent

Supplementary Terms

oral antiinflammatory chemokine inhibitor structure

Citations

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